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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,358	03/27/2001	Lance E. Olson	MS158545.1	1183
27195	7590	07/31/2006	EXAMINER	
AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			POLTORAK, PIOTR	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/818,358		OLSON ET AL.	
	Examiner		Art Unit	
	Peter Poltorak		2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-30 is/are pending in the application.
- 4a) Of the above claim(s) 27-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 22-26 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/01/06 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Response to Amendment

3. Claims 1, 6, 16, 22, 26 and 30 have been amended. Applicant arguments are directed towards the newly introduced claim limitations.
These limitations are addressed in this Office Action, below.

4. Claims 1-20, 22-26 and 30 have been examined.

Claim Objections

5. Claims 1-16 are objected to because of the following informalities: claim 1 recites "a machine learning component that determines anticipated authentication challenges to resource requests from applications based upon run-time learning during previous resource requests by application". It is clear from the specification that the newly introduced limitations are associated with "cache" (e.g. pg. 13-14). However, the

specification does not clearly disclose “a machine learning component” implementing caching.

The claims are not rejected under 35 USC § 112 first paragraph rejection since caching is well known and implemented in the art of computing due to the data access efficiency. Various types of algorithms are utilized to implement caching. For example, some types of algorithms select the most frequently used requests/files that reads on the claim language. Of course in order to accomplish tasks, including identification of frequently used requests, computers use programs. Thus systems implementing such caching inherently comprise a component that would read on a machine learning component as recited in the claim language. However, since the examiner did not find clear disclosure of the “machine learning component” it is not clear whether such interpretation is correct.

6. Claims 2-16 are objected by virtue of their dependence.

Claim Rejections - 35 USC § 112

7. Claims 1-20, 22-26 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term “run-time learning” introduced by the amendment in claims 1,16, 22, 26 and 30 is not clear and for purposes of further examination the phrase is treated as best understood.
8. Claims 2-15, 17-19 and 23-25 are rejected by virtue of their dependence.
Appropriate correction is required.

Claim Rejections - 35 USC § 103

9. Claims 1-5, 13, 16-18 and 30 are rejected under 35 U.S.C. 103(a) as being obvious over *Wu et al.* (U.S. Patent No. 5774551) in view of caching as illustrated by *Hamilton* (Caching, <http://www.net.lut.ac.uk/eval/node6.html>), *Michel* (U.S. Pub. No. 20020133570) and *Lafer et al.* (U.S. Patent No. 6192382).

As per claims 1, 16 and 30 *Wu et al.* teach employing a component implemented on a computer readable medium to accept an authentication challenge and passing a first data associated with the authentication challenge to an authentication manager (*Wu et al.*, Fig. 1, col. 9 lines 47-col. 56). *Wu et al.* teach that the authentication manager processes the first data into second data of a first type appropriate for a first authentication module, and that the authentication manager processes the first data into second data of a second type appropriate for a second authentication module, the first and second authentication modules having different requirements for the second data and passing at least one of the second data associated with the authentication challenge to one or more authentication modules, where the authentication modules are registered with the authentication manager, and where the authentication modules are operatively connected to the authentication manager (*Wu et al.*, col. 9 lines 63-67). The authentication modules are registered with the authentication manager (*Wu et al.*, col. 9 lines 52-56) and produce one or more responses to the authentication challenge (*Wu et al.*, col. 9 lines 67-col. 10 line 2).

10. As per claims 13 and 18 *Wu et al.* teach that the authentication challenge is generated by at least one of a Kerberos authentication system, a digest authentication system, a Basic authentication system, an NTLM authentication system and a certificate based authentication system (*Wu et al.*, col. 2 lines 1-43) and it is a multipart authentication challenge (*Wu et al.*, col. 9 lines 65-67).

11. *Wu et al.* does not teach determining anticipated requests from applications based upon run-time learning during previous resource requests by applications.

However, an old and well-known concept of caching, as illustrated by *Hamilton, Michel [24]* and *Lafer et al.* (col. 3 lines 56-58), implements anticipating requests based upon run-time learning during previous resource requests.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate determining anticipated requests from applications based upon run-time learning during previous resource requests by applications as taught by *Michel* and *Lafer et al.* given the benefit of increased performance and decreased response time to requests.

12. Claims 6-7, 22-23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wu et al.* (U.S. Patent No. 5774551) in view of caching as illustrated by *Hamilton (Caching, <http://www.net.lut.ac.uk/eval/node6.html>)*, *Michel* (U.S. Pub. No. 20020133570) and *Lafer et al.* (U.S. Patent No. 6192382) and further in view of *Travis et al.* (U.S. Patent No. 6269367).

As per claims 3-5 and 7 and 23 *Wu et al.* teach multipart authentication generated by at least one of a Kerberos authentication system, a digest authentication system,

a Basic authentication system, an NTLM authentication system and a certificate based authentication system and producing a set of third data as discussed above and teach that the authentication modules employ one or more services (*Wu et al.*, col. 21 lines 10-23).

13. Furthermore, claims 6, 22 and 26 essentially refer to a pre-step of a previously discussed authentication, wherein instead of receiving, processing and responding to data associated with the communication challenge. The test is conducted and wherein test data received by the authentication manager triggers "pre-authentication procedures" that are essentially the same as the authentication procedures. Although, *Wu et al.* do not explicitly discuss test procedures, conducting tests prior to implementation of a system is old and well-known practice as shown by *Travis et al.* (col. 2 lines 20-41) giving a benefit of addressing and avoiding potential problems prior to the system's live implementation.
14. Claims 8-12, 14-15, 19-20 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wu et al.* (U.S. Patent No. 5774551) in view of caching as illustrated by *Hamilton* (Caching, <http://www.net.lut.ac.uk/eval/node6.html>), *Michel* (U.S. Pub. No. 20020133570) and *Lafer et al.* (U.S. Patent No. 6192382) and further in view of *Travis et al.* (U.S. Patent No. 6269367) and Object Oriented Programming as illustrated by *Burroughs et al.* (U.S. Patent No. 5878411), *Kumar et al.* (U.S. Patent No. 6343287), *Microsoft Press* (Microsoft Press, "Computer Dictionary, 3rd edition, ISBN: 157231446X, 1997) and *New Rider* (New Rider, "Windows 98 Professional Reference", <http://cma.zdnet.com/book/win98prfref/ch15/ch15.htm>).

As per claims 8 and 10-11 *Wu et al.*'s invention is object-oriented system that uses a class factory (*Wu et al.*, col. 12 lines 4-19, 39-47, col. 13 lines 4-11). However, *Wu et al.* do not explicitly teach instantiating one or more authentication objects based, at least in part, on the first data, and authentication objects callable by the authentication manager, and a data store that holds information associated with selectively instantiating the one or more authentication objects that can be callable by the authentication manager. However, these concepts are well known in the art. For example, *Burroughs et al.* disclose fundamentals of Object Oriented Programming:

"A fundamental concept in OOP is the class. A class is a template or prototype that defines a type of object. A programmer may define a class by writing a section of code known as a class definition. An object is an instance of a class. An object is created or instantiated at run-time, i.e., when the computer executes a statement in the program calling for the instantiation of an object of a specified class. An object may include attributes or data as well as functions or methods. The class definition specifies the attributes and methods. The attributes are represented in an object by the values of instance variables" (*Burroughs et al.*, col. 5 lines 15-25).

15. Another example is provided by *Kumar et al.* who's invention involves

"a mechanism, method, and computer program product for linking a profile service instance to a plurality of external data stores. External data store profile that "is created in the profile service that names the connector class. An external data store reference object is created in the profile service instance that identifies the external

data store profile and a number of parameters that specify particular data desired from the external data store. A profile within the profile service instance includes an attribute that names the data store reference object. When the attribute is evaluated, the data store reference object is instantiated, optionally using parameters specified at runtime, and passed as a parameter to an instance of the data store connector class identified by the external data store profile" (*Kumar et al.*, col. 5 lines 10-32).

In light of the above references it would have been obvious to one of ordinary skill in the art at the time of applicant's to register objects with the class factory and with the data store instantiating one or more authentication objects based, at least in part, on the first data, and authentication objects callable by the authentication manager, and a data store that holds information associated with selectively instantiating the one or more authentication objects callable by the authentication manager. One of ordinary skill in art at the time of applicant's invention would have employed such a modification to conform with and take a full advantage of object oriented design, as well as to ensure that the objects are known and utilized by the system.

16. As per claims 12 and 25 *Wu et al.* do not explicitly teach that the applications do not have to be recoded or recompiled in order to employ the newly registered object" is acknowledged.

However, as illustrated by *Microsoft Press (dynamic link library, pg. 166)* as well as *the New Rider's "Windows 98 Professional Reference"* reference (*New Rider, "Understanding HKEY_CLASSES_ROOT" section*) disclose application that does not have to be recoded or recompiled to employ the registered objects were well

known in the art and it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate such applications in order to speed up the applications' execution.

17. As per claims 19-20 and 24 *Wu et al.* teach that one or more authentication modules are "plugged" into and communicate with "pluggable account management" as objects (*e.g. passing parameters, Fig. 1 and col. 13 line 53 col. 14 line 35*) and it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to keep updating the authentication solution disclosed by *Wu et al.* by extending available modules including additional authentication schemes modules. One of ordinary skill in the art would have been motivated to perform such a modification in order to accommodate new authentication protocols.
18. As per claims 14-15 *Wu et al.*'s distributed authentication includes the computer facilitating the authentication, terminal and remote computers (*Wu et al. Fig. 1*).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis Jacques can be reached on (571)272-6962.

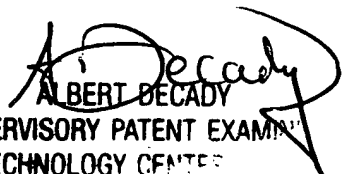
Art Unit: 2134

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



7/24/06



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